

SUBJECT: LA-6 Model.

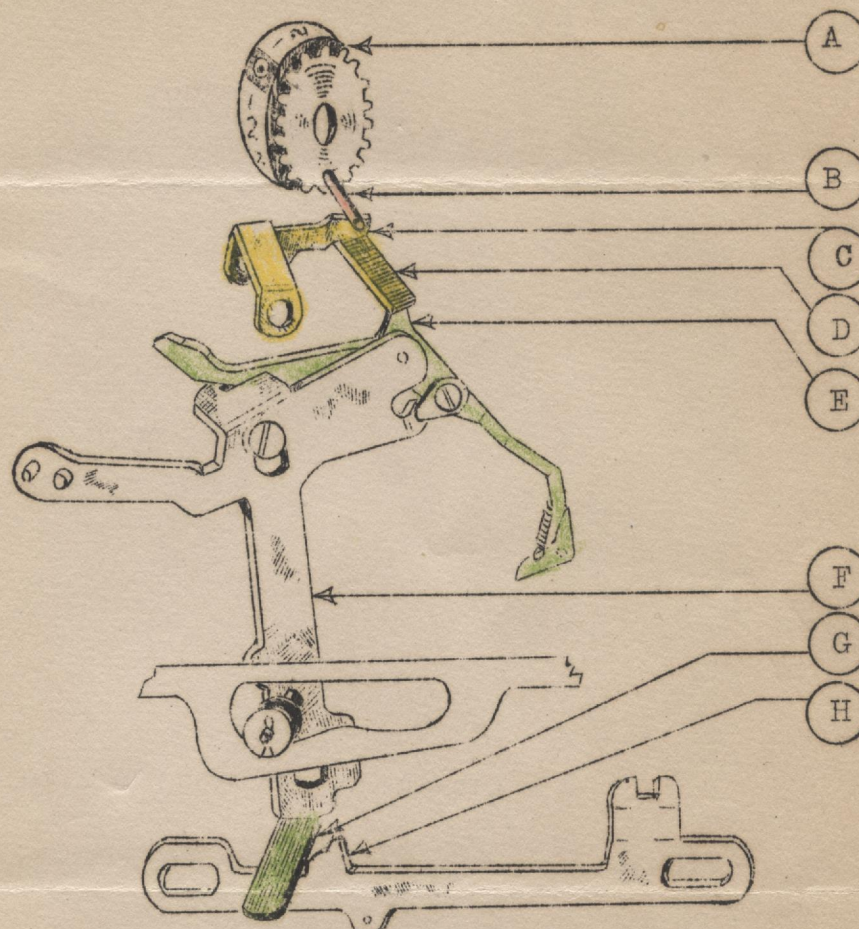
DATE: October 31, 1933.

TO ALL OFFICES:

We release herewith the third installment of Machine Service Bulletin No. 161, Plates 22 to 28 inclusive, which illustrate and describe how to adjust the mechanism not covered in the first installment of this Bulletin.

NOTE: - Figures 3, 4 and 5 pertain to the LA6-W carriage.

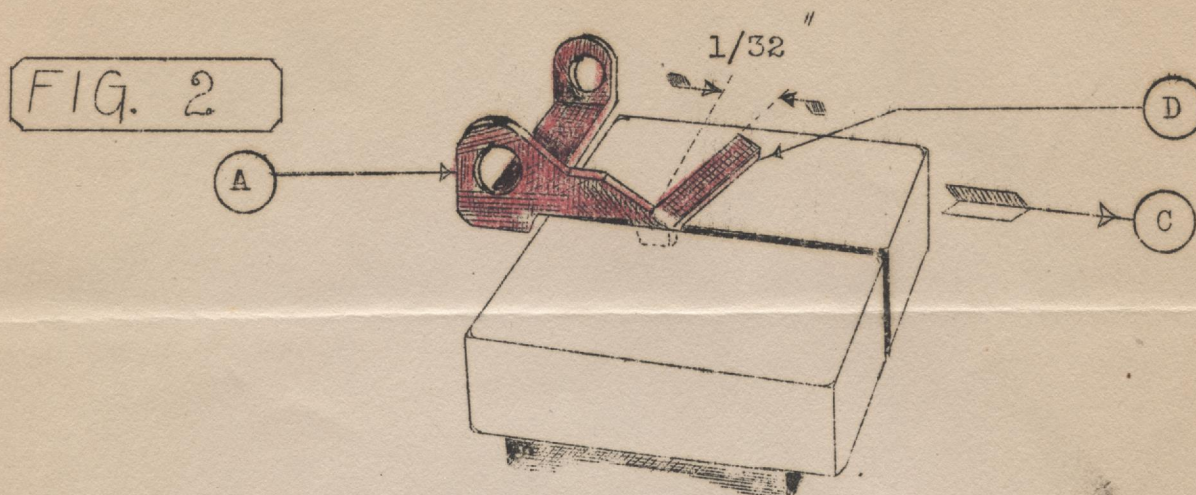
FIG. 1



At the completion of a problem in automatic multiplication, the figure "one" which remained in the upper right hand dial is replaced by the "zero", due to the lug (D) seating on (E), causing an upward movement of (C) which restores the pin (B) to its neutral position. The above operations occur only when lug (G) is latched on (H). If lug (D) is bent too low, dial (A) will not clear out when the carriage crank is turned. If lug (D) is not bent low enough, the zero will not return to its neutral position.

When the lug (G) is unlatched from (H), clearance of .010 should exist between the bottom of lug (D) and the tip of (E). This clearance is obtained by bending lug (D) upward or downward to suit.

Before installing the return arm (A) in the carriage, clamp the arm securely in a vise as shown and using parallel pliers carefully bend the lug (D) in the direction of arrow (C) approximately $1/32$ ". This will assure an engagement of lug (D) with the point of (E), Figure 1, Plate 22.



When the carriage is placed in any position with the exception of the extreme left and the constant key (D) is depressed, the lug (E) on the constant key (D) should engage the trip pawls (F) as shown. If the lug (E) fails to engage (F), bend the lug (E) with kit tool #14 until a direct alignment of (E) with (F) is obtained.

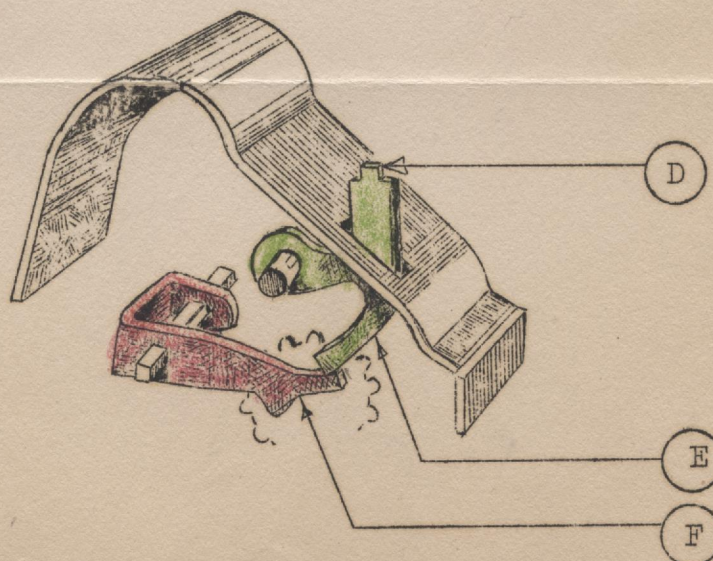
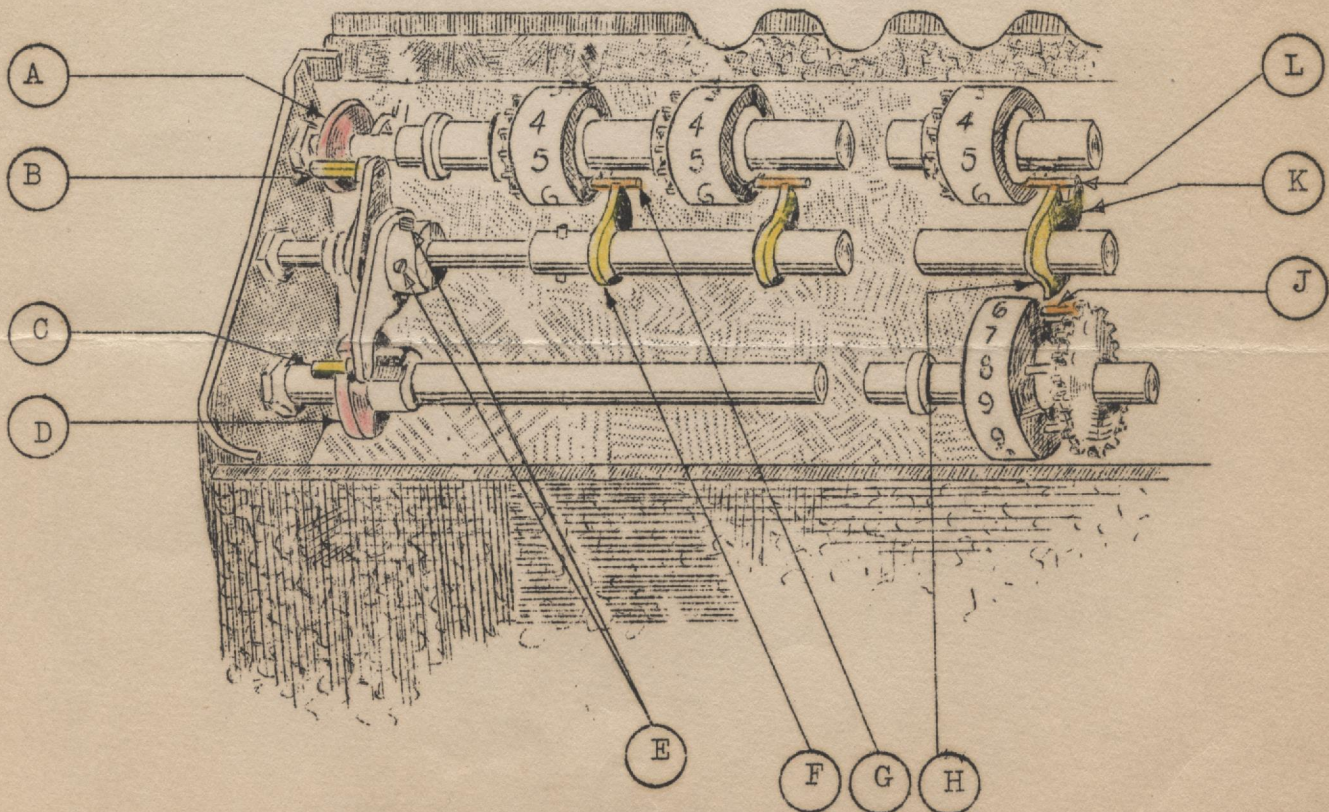


FIG. 3

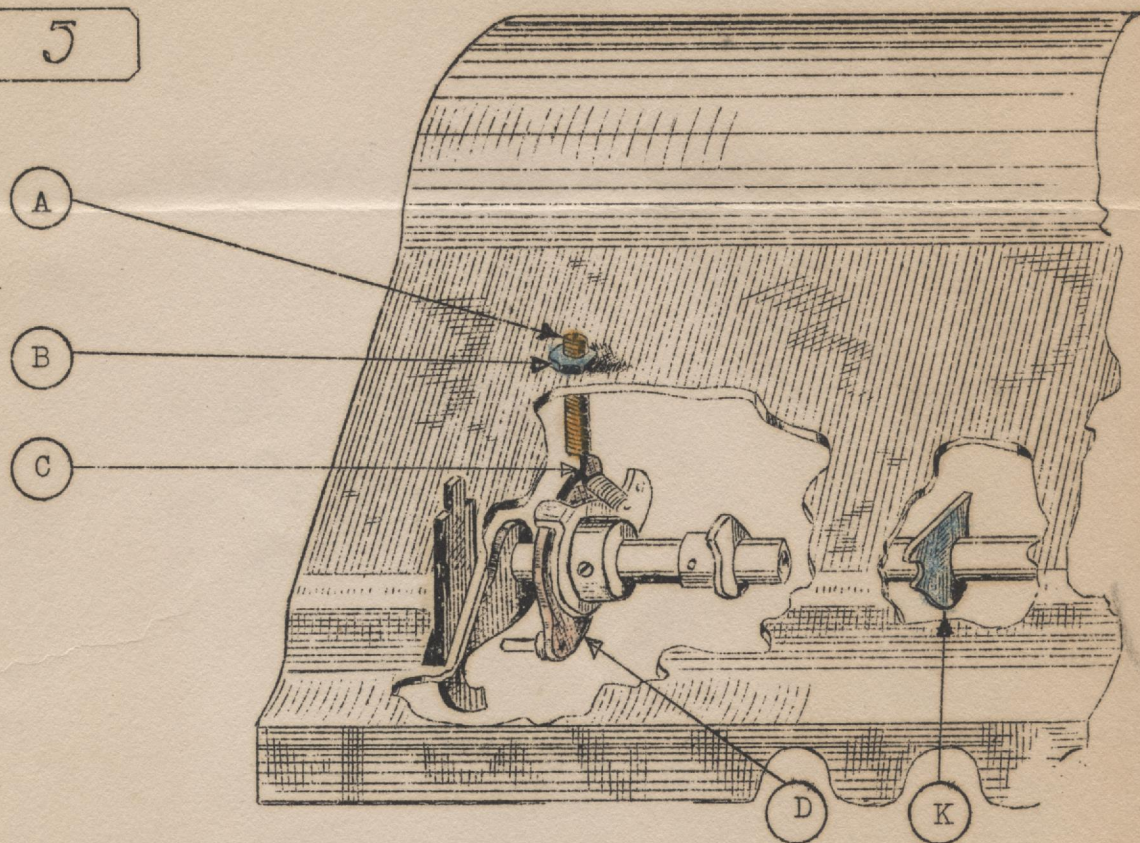
Register figures in the lower dials; turn the carriage clear crank slowly and note the engagement of the fingers (F) and (K) with the clear pins (G) and (L). The fingers should engage the pins (G) and (L) with an approximate $\frac{1}{3}$ hold, providing extension (H) engages pin (J) while the upper dials are being cleared. Set screws (E) provide an adjustment of pins (B) and (C) in relation to cams (A) and (D) for regulating the hold of the fingers (F) and (K) on pins (G), (J) and (L).

FIG. 4



Set screw (A) is provided to limit the movement of arm (C) and the trip rod locator assembly (D), thus controlling the position of pawls (K) in their proper relation to pin (L), Figure 4, Plate 24, when setting in a constant on the registering dials. After the correct adjustment has been determined, tighten nut (B) securely.

FIG. 5



The lock bar (J) on the through unit (L) is adjusted to the carriage rack (M) by loosening screw (H) and positioning the lock bar (J) upward or downward to suit. After the correct position has been decided, tighten screw (H) securely.

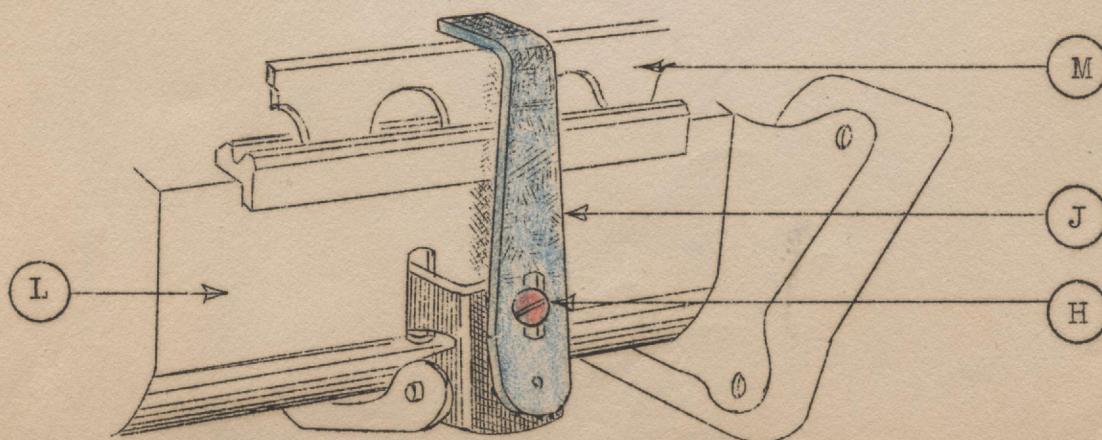
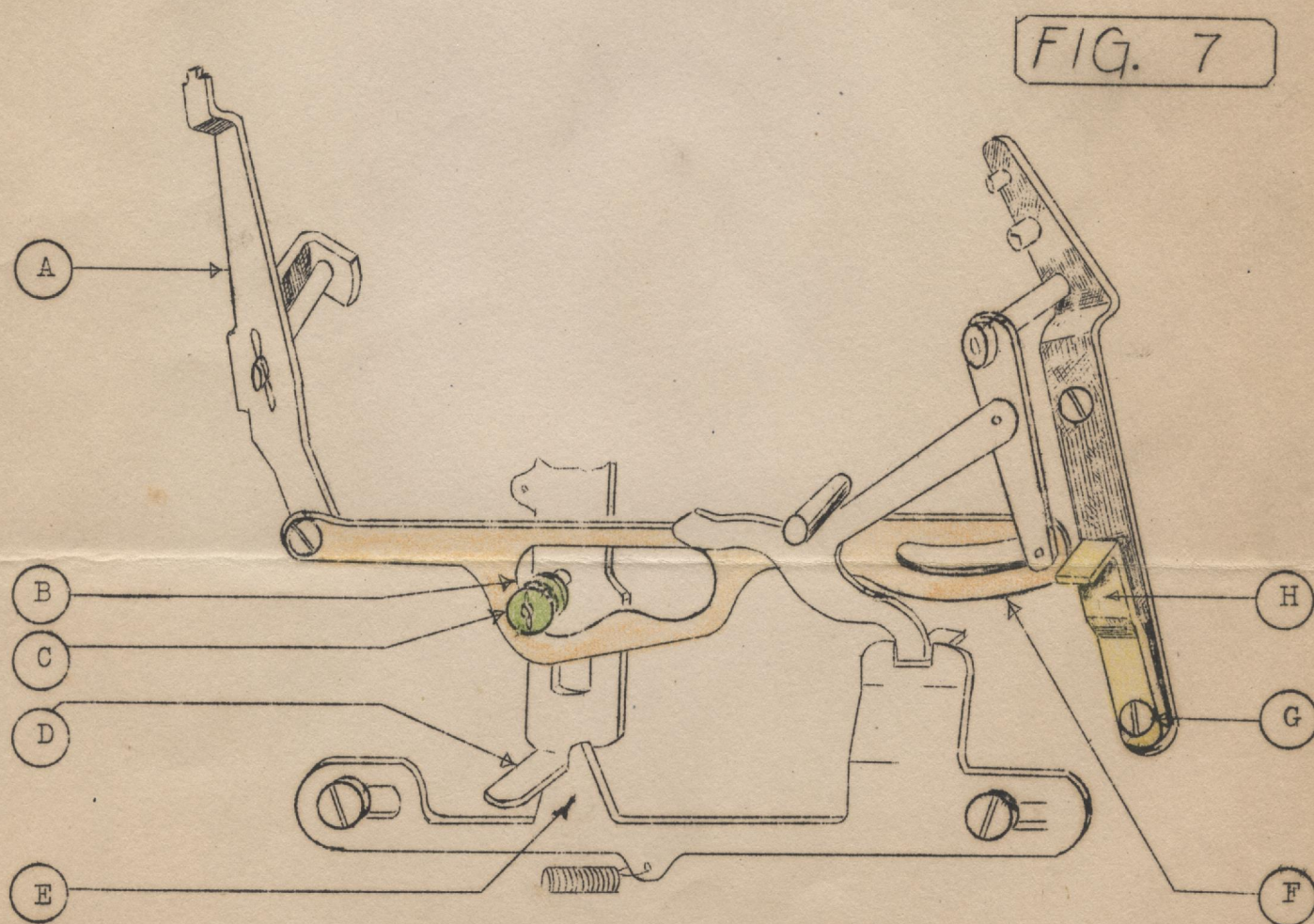


FIG. 6

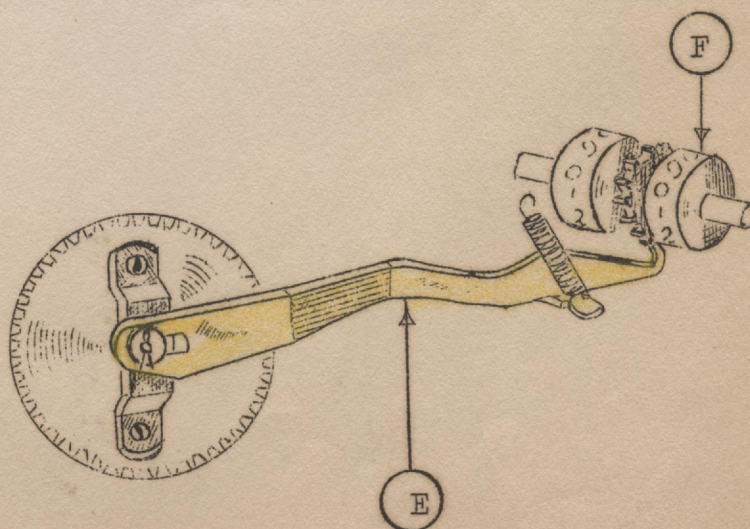
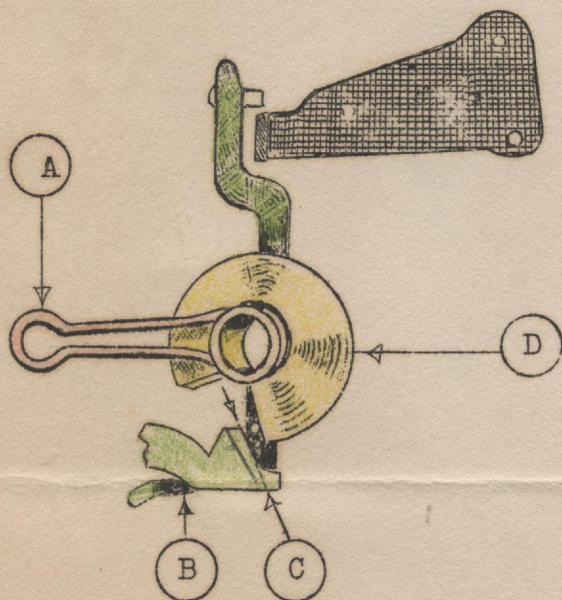
Blank (H) is provided to prevent a too-hasty unlatching of (D) from (E) which is caused by blank (B) striking roller (C) when the multiplication lever (A) is automatically restored to neutral. Approximately .015 clearance should exist between the lug of blank (H) and link (F) when the multiplication lever (A) is positioned as shown. This clearance may be obtained by loosening screw (G) and positioning blank (H) to suit. After the correct adjustment has been made, tighten screw (G) securely.



If during automatic division incorrect figures appear in the lower right hand dials, it is due to lock (B) striking the edge of cam (D) when the cycle stop arm is positioned against the bumper pad, thereby not allowing the lock to raise sufficiently high to permit the shifting of the carriage. This delay allows the counting finger (E), Figure 9, to engage the registering dials (F) twice and register accordingly.

This condition may be overcome by replacing the carriage lock cam with a cam having a larger notch or grinding $1/32$ " off the carriage lock (B) at (C), being careful to keep the original angle.

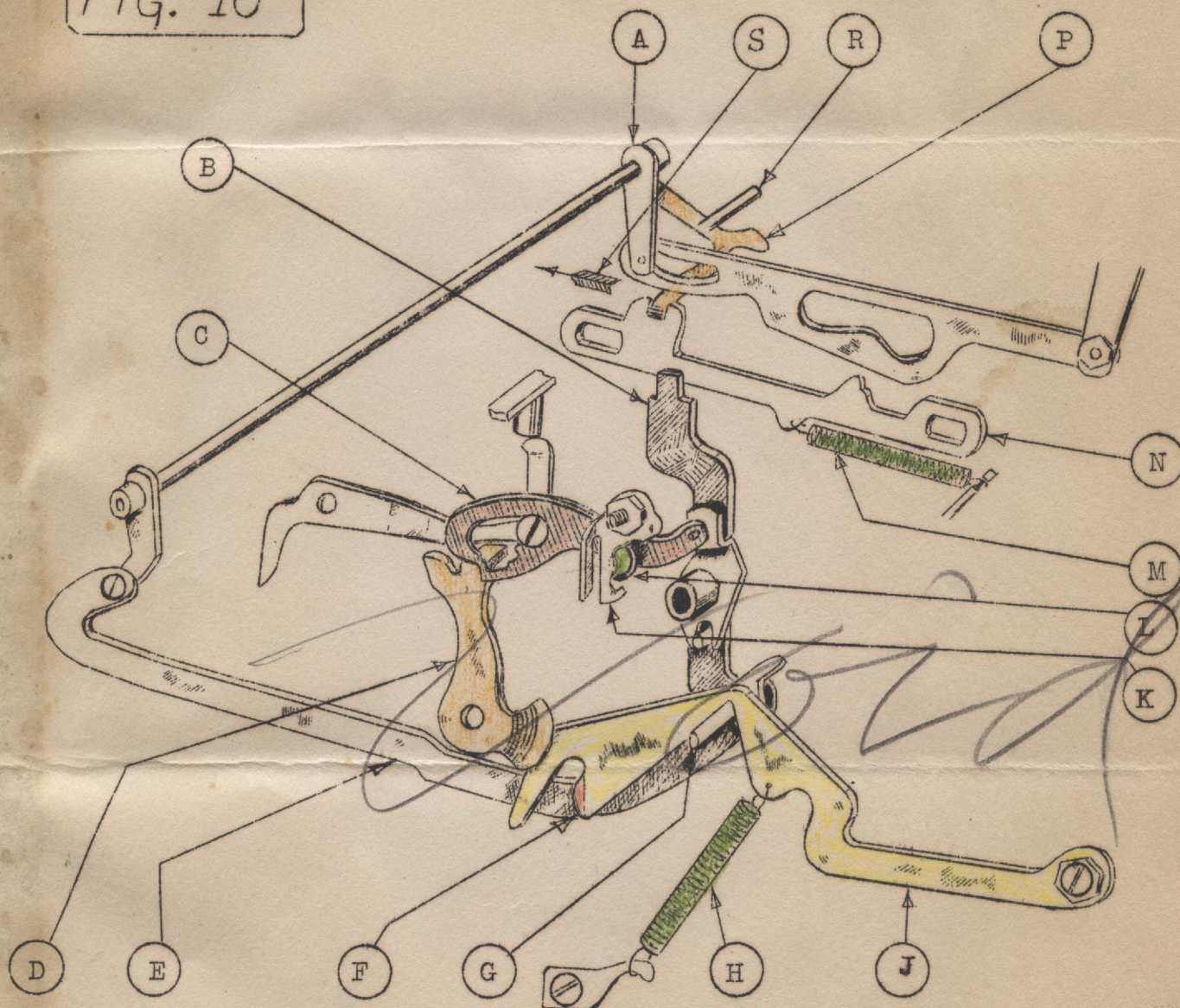
This condition may also be remedied in some cases by increasing the tension of the brake springs (A) on the carriage lock cams (D).



Additional stock, as shown in red, has been added to the division lever click (J) because when the multiplication lever was restored to neutral at the completion of a problem, the pin (R) on the main shaft gear would strike the lever (P) which, instead of pulling latch (N) in the direction of arrow (S), would apply pressure on arm (A) causing link (E) to move stud (G). The original click (J), due to the degree of angle at (F), could not prevent this.

NOTE: - Do not change the original tension of springs (H) and (M) as additional tension increases the load of restoring the division lever.

FIG. 10



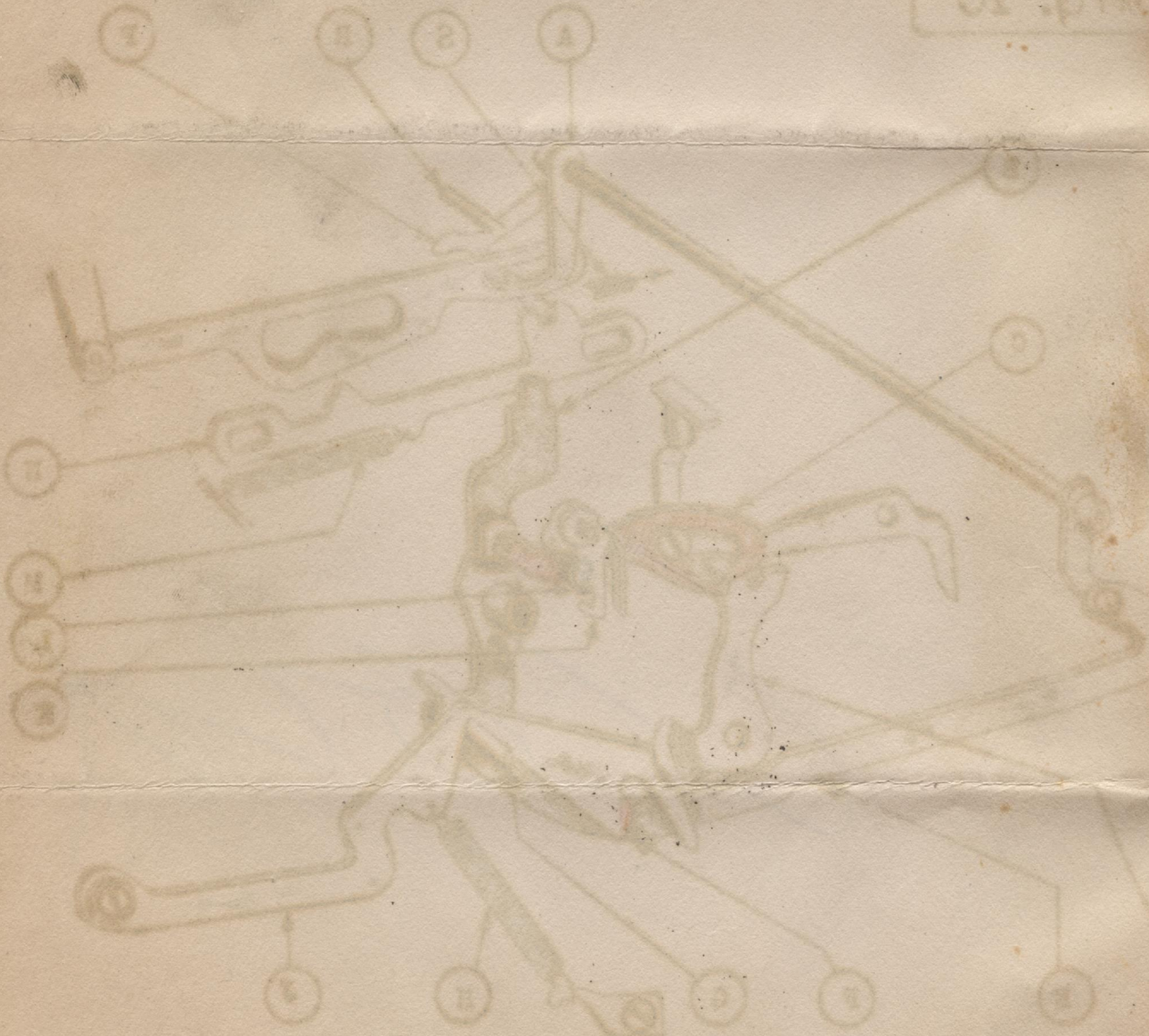
To remedy a condition wherein the division lever (B) fails to restore or restores sluggishly, a button of .040 thickness (L) has been added to the guide blank (K). This prevents the blank (C) from camming out of engagement with the restoring arm (D) as shown.

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When the lever (N) falls to its normal position, the piston (L) has been moved to the right, causing the lever (N) to fall to its normal position. This prevents the piston (L) from being out of engagement with the restoring arm (D) as shown.

Do not change the original tension of springs (M) and (N) as additional tension increases the load of restoring the division lever.

Fig. 10



When the lever (N) falls to its normal position, the piston (L) has been moved to the right, causing the lever (N) to fall to its normal position. This prevents the piston (L) from being out of engagement with the restoring arm (D) as shown.